Appl. No.: 10/007,156 PATENT

Amdt. dated: March 8, 2007

Amendment under 37 CFR 1.116 Expedited Procedure

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## REMARKS/ARGUMENTS

Claims 1-38 are pending in this Application. Claims 1, 20, 34, and 35 have been amended. Claim 39 is newly added. No new matter has been introduced thereby.

In the Office Action mailed, the Examiner objected to the information disclosure statement filed on May 24, 2002. The Examiner indicated that there was no copy of PTO/SB/08A. Applicant submits that the information disclosure statement submitted inadvertently expressed a statement to PTO/SB/08A. Applicant indicates that there are no references to be included in PTO/SB/08A. The statement to PTO/SB/08A was a mistake without deceptive intent. Accordingly, the objection should be moot.

Claims 1-5 and 10-38 were rejected under 35 U.S.C. 103(a) as being unpatentable over Milic-Frayling et al (US 2006/0059138) in view of The National Library of Medicine internet home page (www.webarchive.com from the year 2000) or "NLM". Claims 6-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Milic Frayling *et al.* in view of The National Library of Medicine internet home page (www.webarchive.com from the year 2000) or "NLM", in further view of "Creating a CD-ROM: Overview of the product field. (CD-ROM authoring and data retrieval software packages; includes company directory and related article on resources for doing research)", Buyers Guide by Bernard Banet, Seybold Report on Desktop Publishing, v7, n6, February 1, 1993. As noted, the cited references, alone or in combination, do not disclose or suggest the present method of identifying and ranking entities having expertise in one or more subjects in health care fields as recited in amended claim 1.

Specifically, Applicant has amended claim 1 to overcome an issue pointed out by the Examiner. As noted by the Examiner in the Office Action mailed September 8th, 2006, the Examiner notes that "the features upon which applicant relies (i.e., teach "entities having expertise in one or more subjects in health care fields" as cited on the second page of the Remarks section) are not recited in the rejected claim(s)." As shown above, claim 1 clearly recites "determining entities affiliated with each relevant documents, each of the entities having expertise in one or more subjects in the health care field and each of the entities being affiliated with one or more documents in a set in combination with other elements. In a specific

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embodiment, at least one of the entities includes an institution or person affiliated with the set of the one or more documents. Additionally, Applicant further points out other differences between Milic Frayling *et al.* and claim 1, as amended.

As noted, the cited references do not teach or suggest each and every feature of the present method of identifying and ranking entities having expertise in one or more subjects in health care field as recited in claim 1, as amended. The method includes querying a database for documents relevant to a subject, and calculating a first score for each relevant document. The method then determines entities affiliated with each relevant document in a set. Each of the entities has expertise in one or more subjects in health care fields. For example, the entity can be a person or an institution affiliated with the document. The method then calculates a second score for each entity based on the first scores of the relevant documents associated with the entity.

In contrast, Milic-Frayling *et al.* merely provide a method to assist a user to evaluate the relevance of a document, for example, the method highlights keywords or phrases that a user inputs for a query (Paragraphs 40, 42). The user can then determine the relevance of the document. A user can also request desired ranking of a document based on the user's need.(Paragraph 55). The method according to Milic-Frayling *et al.* does not identify or rank entities (person or institution) affiliated with each relevant documents in one or more subjects in health care field as recited in amended claim 1. Accordingly, claim 1 is patentable over Milic-Frayling et al.

The Examiner also cited Banet combined with Milic-Frayling *et al.* to reject claims 6-9, and 19-20. As noted, the cited references, alone or in combination fail to disclose or suggest the present method of identifying entities having expertise in one or more subjects in the manner claimed. Banet described features of CD-ROM retrieval software using fields such as "author", "date", "title", "subject" as keywords to search for a document. In contrast, the method according to present invention first queries a database for documents relevant to a subject in health care fields and calculates a score for each document. The method according to the present invention then determines entities affiliated with each relevant documents in a set and calculates

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relevant documents. Again, as an example, the entities could be authors, institutions, and others. The method also includes calculating a score (e.g., quantification, numerical estimate) for each entity in the first set of entities based on the number of relevant documents associated with each entity. As an example, the method initially populates a database with, for example, the entity such as the institution and/or the author with associated score or scores. The method includes populating a second database to include each of the entities in the first set of entities and the score associated with each of the entities in the first set of entities.

Now that the database has been populated, a user can, for example set up a query to determine a desired institution and/or author or the like based upon the subject, which can coronary bypass or stroke, as an example. As provided by claim 34, the method includes receiving a query related to an entity. The method includes determining a second set of entities associated with the entity related to the query. The method includes retrieving from the second database the score associated with each entity in the second set of entities. The method includes presenting to a user the scores of the entities in the second set of entities or a ranking of the entities in the second set of entities in the second set of entities. The score of an entity is indicative of the expertise in the subject associated with the entity. Such features are not suggested or disclosed in cited references. Additionally, the Examiner completely misread the invention of claim 34. Accordingly, claim 34 should be allowed. Dependent claims 35-38 are also allowable.

Applicant asserts that claim 39 is patentable over cited references, alone or in combination. Claim 39 recites a combination of elements such as "querying a database for documents relevant to a subject in a health care field", "calculating a first score for each relevant document", "determining entities affiliated with each relevant document", "each of the entities having expertise in one or more subjects in health care fields", "each of the entities being affiliated with one or more documents in a set, at least one of the entities includes an institution or person affiliated with the set of the one or more documents", "calculating a second score for each entity based on the one or more first scores of the relevant documents affiliated with the entity", "ranking expertise of the entities based on the respective second scores of the entities",

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a second score for each entity having expertise in one or more subjects in health care fields. The method ranks the expertise based on the second score and displays the expertise associated with the respective entities. The entities recited in claim 6 and claim 19 include an author or one or more institution from which the document emanated. Accordingly, the entities recited in claim 1, as amended, are an output of the query rather than a keyword used for searching. Accordingly, claim 1, as amended is patentable over the cited references, alone or in combination. Corresponding dependent claims 2-29 and additional features cited therein, should also be allowed based on at least the same reasons and others.

The Examiner further relied on The National Library of Medicine (NLM) internet homepage as a source of documents from the health care fields to combine with Milic-Frayling et al. As noted, Milic-Frayling et al. merely provide a method for document search based on key words or key phrases and assist a user to view the document more easily. Therefore NLM does not cure the aforementioned deficiency and irrelevance of Milic-Frayling *et al*. Accordingly, claim 1 is patentable over cited references, alone or in combination.

Claim 30, which discloses a system for a method for assessing expertise associated with an entity in a subject in health care fields should also be allowed based on the rationale as discussed for claim1, and others. Accordingly, claim 30 is also patentable.

In the Office Action, the Examiner completely misunderstands the invention recited by claim 34. On page 6 of the Office Action, the Examiner indicates as "per claims... 34, Milic-Frayling teaches calculating a third score for each of the plurality of geographic areas based on the respective second scores of entities located within the each of the plurality of geographic area [sic]..." As can be seen above, claim 34 does not even recite any third score and/or geographic area. Clearly, claim 34 is patentable over cited references, alone or in combination and the Examiner's rejection appears meaningless.

As shown, claim 34 recites a method of assessing expertise associated with an entity in a subject in health care fields. As an example, the subject can be coronary bypass, nausea, stroke, and others. The method includes querying a database (e.g., Pubmed) for documents relevant to the subject and determining a first set of entities associated with the

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and "displaying expertise associated with the respective entities to a user". As noted, such claimed elements are not taught or even suggested by the cited references, alone or in combination. Accordingly, all claims now pending in this application should be allowed for these reasons and others.

## **CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

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Attachments RTO:wcf 60999163 v1